



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

APP - 3 2016

REPLY TO THE ATTENTION OF

CERTIFIED MAIL 7009 1680 0000 7663 5622
RETURN RECEIPT REQUESTED

Mr. Joe Braun
Environment Health & Safety Engineer
Rexnord Industries, LLC
2400 Curtiss Street
Downers Grove, Illinois 60515

Re: Notice of Violation
Compliance Evaluation Inspection
EPA ID No. ILD 005 455 571

Dear Mr. Braun:

On April 22, 2015 a representative of the U.S. Environmental Protection Agency inspected the Rexnord Industries, LLC facility located in Downers Grove, Illinois ("Rexnord"). As a large quantity generator of hazardous waste, Rexnord is subject to the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 *et seq.* (RCRA). The purpose of the inspection was to evaluate Rexnord's compliance with certain provisions of RCRA and its implementing regulations related to the generation, treatment and storage of hazardous waste. A copy of the inspection report is enclosed for your reference.

Based on information provided by Rexnord, EPA's review of records pertaining to Rexnord, and the inspector's observations, EPA has determined that Rexnord has unlawfully stored hazardous waste without a permit or interim status as a result of Rexnord's failure to comply with certain conditions for a permit exemption under Ill. Admin. Code tit. 35 § 722.134(a)-(c) [40 C.F.R. § 262.34(a)-(c)]. EPA has identified the permit exemption condition with which Rexnord was out of compliance at the time of the inspection in paragraph 1, below.

Many of the conditions for a RCRA permit exemption are also independent requirements that apply to permitted and interim status hazardous waste management facilities that treat, store, or dispose of hazardous waste (TSD requirements). When a hazardous waste generator loses its permit exemption due to a failure to comply with an exemption condition incorporated from Ill. Admin. Code tit. 35 Part 725, the generator: (a) becomes an operator of a hazardous waste storage facility; and (b) simultaneously violates the corresponding TSD requirement. The exemption condition identified in paragraph 1 is also an independent TSD requirement incorporated from Ill. Admin. Code tit. 35 Part 725. Accordingly, each failure of Rexnord to comply with these conditions is also a violation of the corresponding requirement in Ill. Admin.

Code tit. 35 Part 725 [40 C.F.R. Part 265] (if the facility should have fully complied with the requirements for interim status), or Ill. Admin. Code tit. 35 Part 724 [40 C.F.R. Part 264] (if the facility should have been permitted).

STORAGE OF HAZARDOUS WASTE WITHOUT A PERMIT OR INTERIM STATUS AND VIOLATIONS OF TSD REQUIREMENTS

At the time of the inspection, Rexnord was out of compliance with the following large quantity generator permit exemption condition:

The permit exemption condition identified below in paragraph 1 is also an independent TSD requirement violated by Rexnord:

1. Contingency Plan

Under Ill. Admin. Code tit. 35 §§ 722.134(a)(4) and 725.152 [40 C.F.R. §§ 262.34(a)(4) and 265.52], a large quantity generator must have a written contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water. The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

With respect to said contingency plan, a large quantity generator must include a list of names, addresses and phone numbers of all persons qualified to act as emergency coordinators. This list must be kept up to date. In addition, a large quantity generator must include in his contingency plan a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

At the time of the inspection, Rexnord's Facility Emergency Response Plan (March 2007 revision) did not include a description of the capabilities of all of its emergency equipment and it lacked an updated emergency contact list.

By e-mail dated January 26, 2016, Rexnord provided EPA with its revised Facility Emergency Response Plan (revised January 2016). The revised January 2016 Facility Emergency Response Plan included corrections to the above-referenced deficiencies.

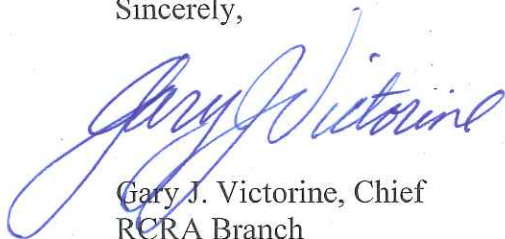
This matter was therefore resolved and no further action is required of Rexnord with respect to the contingency plan requirement violation.

Summary: By failing to comply with the conditions for a permit exemption, above, Rexnord became an operator of a hazardous waste storage facility, and was required to obtain an Illinois hazardous waste storage permit. Rexnord failed to apply for such a permit. Rexnord's failure to apply for and obtain a hazardous waste storage permit violated the requirements of Ill. Admin. Code tit. 35 §§ 703.121(a) and (b); 703.180(c); and 705.121(a) [40 C.F.R. §§ 270.1(c), and 270.10(a) and (d)]. Any failure to comply with a permit exemption condition incorporated from Ill. Admin. Code tit. 35 Part 725 is also an independent violation of the corresponding TSD requirement.

After the inspection, as documented in e-mail dated January 26, 2016, you took certain actions to establish compliance with the permit exemption conditions and independent TSD requirement of paragraphs 1, above. Based on the information received from Rexnord on January 26, 2016, EPA is not planning additional enforcement actions based on this inspection at this time. This letter does not limit the applicability of the requirements evaluated, or of other federal or state statutes or regulations. EPA appreciates Rexnord's cooperation.

If you have any questions regarding this letter, please contact Mr. Valentino, of my staff, at 312-886-4582 or at valentino.michael@epa.gov.

Sincerely,



Gary J. Victorine, Chief
RCRA Branch

Enclosure

cc: Todd Marvel, Illinois EPA, (todd.marvel@illinois.gov)

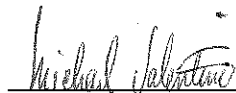
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 W. JACKSON BOULEVARD
CHICAGO, IL 60604

COMPLIANCE EVALUATION INSPECTION REPORT

MEMORANDUM TO FILE

INSTALLATION NAME: Rexnord Industries, LLC
U.S. EPA ID No.: ILD 005 455 571
LOCATION ADDRESS: 2400 Curtiss Street
Downers Grove, IL 60515
NAICS CODES: 332991 (Ball and Roller Bearing
Manufacturing)
DATE OF INSPECTION: April 22, 2015
EPA INSPECTOR: Michael Valentino

PREPARED BY:

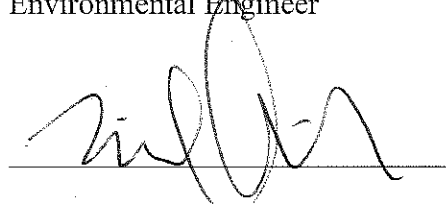


Michael Valentino,
Environmental Engineer

2-19-16

Date

REVIEWED BY:



Michael Cunningham, Chief
Compliance Section 1
RCRA Branch

2-19-16

Date

Purpose of Inspection:

The purpose of the inspection was to perform an unannounced compliance evaluation inspection (CEI) at Rexnord Industries, LLC ("Rexnord"), a hazardous waste large quantity generator, to determine its compliance with the Resource Conservation and Recovery Act, specifically the Standards Applicable to Generators of Hazardous Waste, Standards for Land Disposal Restrictions, and Management of Used Oil set forth at 35 Illinois Administrative Code (IAC), Title 35: Environmental Protection, Subtitle G: Waste Disposal, Chapter I: Pollution Control Board, and Title 40 of Code of Federal Regulations (40 CFR) Parts 262 to 265, 268 and 279, respectively.

Participants:

Joe Braun, EHS Engineer (ph: 630-353-6513; joseph.braun@rexnord.com), represented Rexnord. Michael Valentino represented U.S. EPA Region 5, Land and Chemicals Division, RCRA Branch.

Facility Description:

Rexnord is a manufacturer of bearings and seals. Manufacturing processes include machining, grinding, plating and heat treating. Rexnord occupies 250,000 square feet of office, production, maintenance, warehouse and shipping & receiving space in two two-story brick buildings.

Rexnord is located in a commercial-industrial-residential area in Downers Grove, DuPage County, Illinois. Rexnord is bordered on the north by the Burlington Northern Santa Fe Metra line and to the north of the railroad tracks, a residential community; to the east and south by industry and to the west by the Downers Grove municipal wastewater treatment plant. A small tributary, St. Joseph Creek, runs to the south of the facility.

Rexnord employs electroplating which uses cyanide and cadmium.

Rexnord generates a number of waste streams including spent acid baths, wastewater treatment sludge, cyanide-bearing plating waste and chlorinated rinses. Rexnord also manages used oil and universal waste (spent light bulbs). Rexnord operates an onsite wastewater treatment system for pH control and to destroy cyanides.

Rexnord employs approximately 300 people at this location. Rexnord operates 24 hours per day, Monday through Friday. Rexnord has been at its Downers Grove location since 1955.

Opening Conference:

I arrived at the facility at approximately 11:15 am on Wednesday, April 22, 2015. Upon arriving I asked for Mr. Braun. I waited in the lobby for approximately five minutes for

Mr. Braun to arrive. When he arrived I introduced myself, displayed my enforcement credentials and explained the nature of my visit.

Mr. Braun then led me to an office. Mr. Braun gave me a brief overview of operations at the facility. I then told him that I would like to walk through the areas where hazardous waste is generated and accumulated for offsite shipment, and after touring the facility I would like to conduct a records review.

Facility Inspection and Observations:

Mr. Braun and I began the site walk-through at approximately 11:45 am CDT. During the course of the walk-through, I took seven (7) photographs on a Nikon Coolpix® P4 digital camera with 8.1 megapixel. These photos are found below in this report. They are true and representative of the conditions I observed at the installation on the date of the CEI.

We began the site tour at the 90-day hazardous waste accumulation area where I observed nine (9) 55-gallon plastic drums and one (1) one-cubic yard fabric tote labeled, staged and ready for shipment. The 90-day area is a room with metal walls and an epoxy-coated concrete floor. The floor was found to be in excellent condition, free of any cracks, gaps and fully coated. The room is fitted with blinded-off containment sumps. The room is equipped with spill response kits and fire extinguishers. Emergency phone numbers and weekly container inspection log books are found in the room. There was adequate aisle space on the day of the inspection. The drums and tote were properly labeled, closed and in good condition. None of the containers approached the 90-day limit. I did not observe waste on the floor or any evidence of spillage from the containers in the 90-day room.

We then proceeded to the satellite accumulation area where several 55-gallon plastic drums were used to accumulate waste streams including acid debris, cyanide debris (gloves), lead soil tape, cyanide filters and spent chrome filters. The drums were affixed with hazardous waste labels, closed and in good condition. There was no evidence of spillage on or near the drums.

We next visited the onsite wastewater treatment area where I met the waste treatment operator, Dave Devries. Mr. Devries provided an overview of Rexnord's wastewater treatment process. Rexnord's wastewater treatment system operates two batch treatment tanks, both of which are above-ground steel tanks. Liquid sodium hydroxide is used to raise pH and sulfuric acid is used to lower pH in the treatment tanks. Sodium hypochlorite is used to destroy cyanide.

Plating tank overflow and carryout is collected in pits beneath the plating lines and hard-piped into a holding tank or one of the treatment tanks. The pH is lowered to a range of 1-2 to drop out hexavalent chromium (Cr^{6+}). The pH is then raised to 10, a flocculent is added and the floc is sent to a sludge holding tank. From the sludge holding tank the sludge is run through a filter press where it is dewatered. For cyanide destruction, sodium hypochlorite is added to the tank. The pH is lowered to 1 and mixed for 24

hours. The pH is then raised to 10.5 and tank contents are allowed to settle. The supernatant is sent to a secondary reactor which precipitates out complex cyanide (cyanide salts). Scientific Controls Laboratories, Inc. samples and analyzes for total cyanide every six months. Final pH adjustment places wastewater effluent in the pH range of 6-9 at the facility's outfall.

According to Mr. Devries, Rexnord generates one cubic yard of filter press sludge approximately every month. Filter press sludge is sent to U.S. Ecology.

We concluded the walk-through at the universal waste storage area, which is located in the 90-day hazardous waste area. Here, Rexnord stores four-foot fluorescent lamps. Waste lamps are sent to Fluorecycle, Inc. in Ingleside, Illinois.

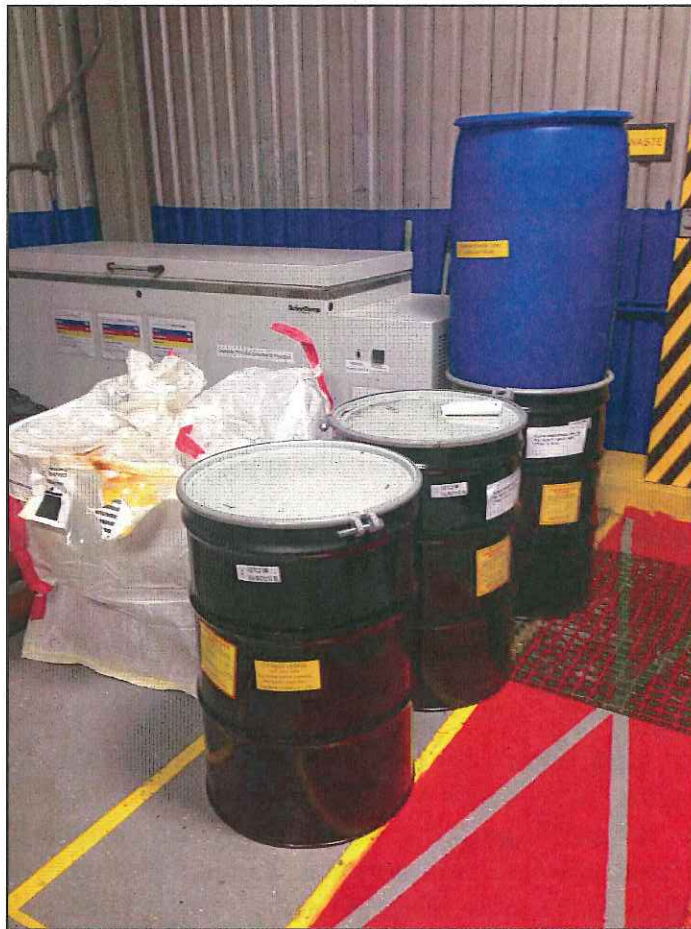


Photo 1	Rexnord 2400 Curtiss Street Downers Grove, IL 60515
4/22/15 11:53 am Taken by: Michael Valentino	<u>Description:</u> 90-day hazardous waste area. Drums (4) of hazardous waste and one fabric tote awaiting offsite shipment.



Photo 2	Rexnord 2400 Curtiss Street Downers Grove, IL 60515
4/22/15 11:53 am Taken by: Michael Valentino	<u>Description:</u> 90-day hazardous waste area. Immediately to the right of Photo 1. Four drums of hazardous waste, center of photo (to the left of photo are the four hazardous waste drums seen in Photo 1). Five plastic drums in the furthest row to the right are raw materials.

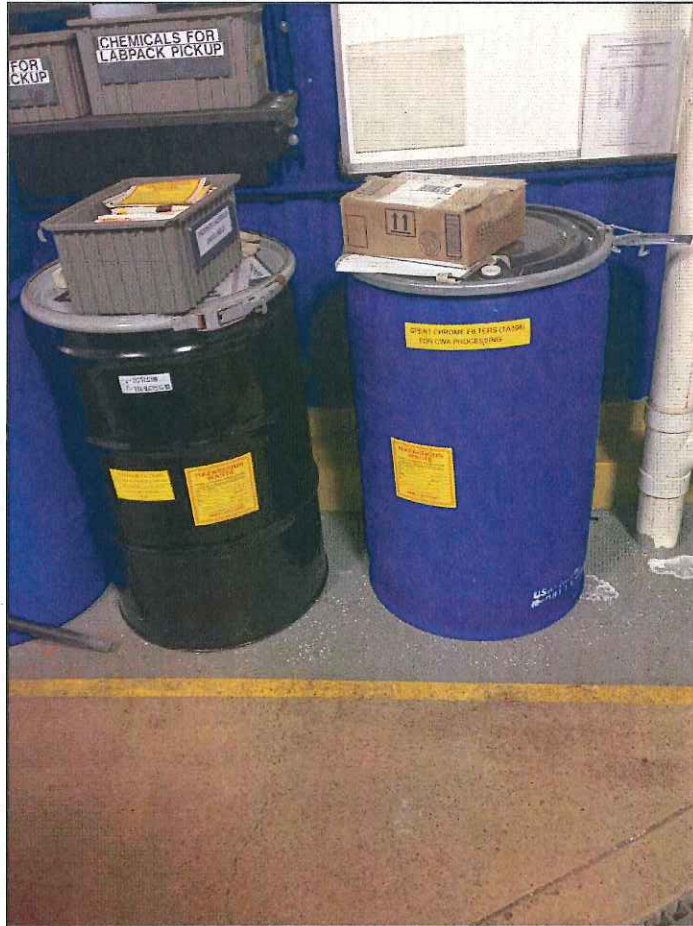


Photo 3	Rexnord 2400 Curtiss Street Downers Grove, IL 60515
4/22/15 11:56 am Taken by: Michael Valentino	Description: Two satellite accumulation area drums. The drum to the left appears in Photo 4.



Photo 4	Rexnord 2400 Curtiss Street Downers Grove, IL 60515
4/22/15 11:56 am Taken by: Michael Valentino	Description: Three satellite accumulation area drums. The drum to the right appears in Photo 3.



Photo 5	Rexnord 2400 Curtiss Street Downers Grove, IL 60515
4/22/15 11:56 am Taken by: Michael Valentino	Description: Satellite accumulation area containers.

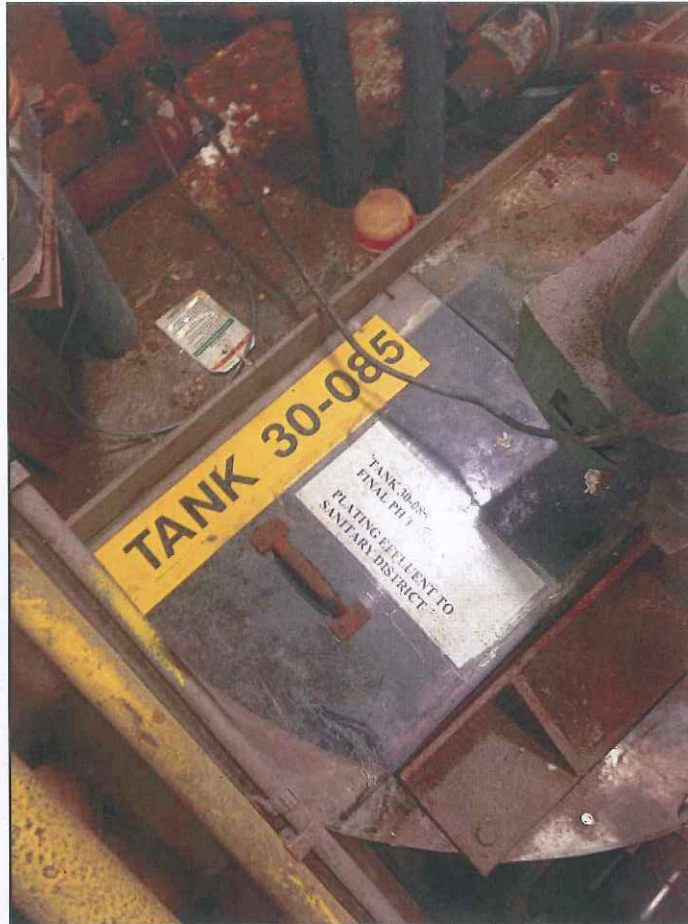


Photo 6	Rexnord 2400 Curtiss Street Downers Grove, IL 60515
4/22/15 12:07 pm Taken by: Michael Valentino	<u>Description:</u> Wastewater treatment area. Final pH adjustment tank prior to discharge.



Photo 7	Rexnord 2400 Curtiss Street Downers Grove, IL 60515
4/22/15 12:14 pm Taken by: Michael Valentino	Description: 90-day hazardous waste area.

At the conclusion of the walk-through Mr. Braun and I returned to the office area where I reviewed the facility's records.

Records Review:

I reviewed the following on the day of the inspection.

Hazardous Waste Manifests

I reviewed hazardous waste manifests from 2013-2015. Manifests were filled out properly. Signed facility copies were received by Rexnord within 35 days of shipment.

Annual Hazardous Waste Reports

I asked for annual hazardous waste generator reports for 2013 and 2014. Mr. Braun did not produce copies of the annual reports for me at the time of the inspection but said that he would email them to me.

The reports were scanned and sent to me electronically by Mr. Braun on April 22, 2015 (the 2014 report) and on April 23, 2015 (the 2013 report).

The 2013 report was signed on February 26, 2014. The 2014 report was signed on February 26, 2015.

The following table shows the waste streams and amounts generated during 2013 and 2014.

WASTE STREAM	WASTE CODES	AMOUNT SHIPPED OFFSITE IN 2013	AMOUNT SHIPPED OFFSITE IN 2014
Acidic plating debris	D006, D007	1540 lb	800 lb
Ammonia copper stripper solution	D002	13,327 lb	12,416 lb
Chlorinated rinses	D002, D006, D007	141,737 lb	267,717 lb
Chromic acid tanks	D002, D007, D006, D008, D004	5867 lb	17,184 lb
Cyanide debris	F007, D003, D006	400 lb	1890 lb
F006 sludge	F006	6000 lb	17,400 lb
F006 high chrome	F006	9150 lb	
Grinding swarf	D006	20,800 lb	13,100 lb
HEPA shop vacuum	D006	90 lb	
Hydrogen sulfide gas	U135, D001, D003	10 lb	
Lab pack – corrosive and flammable liquids	D002, D006, U154, D001	15 lb	
Methane gas	D001	5 lb	
Mixed Cu and zinc nickel plating waste	F007, D002, D003	1377 lb	
Spent waste luster – LAC 404	D007	459 lb	
Treated wastewater from electroplating	F006, F007	220,541 lb	33,381 lb
Waste air handling filters from Cd and Zn-Ni plating	D006	140 lb	
WWT line debris	F006, F007	40,000 lb	
Zinc nickel solution	D002	8512 lb	8971 lb
Cyanide plating bath filters	D006, F008	1650 lb	799 lb
Cadmium copper cyanide plating solution	D002, D003, D006, F007, F008	4250 lb	16,595 lb
Broken lamps	D009	5103 lb	
150/PRF/PDF solvent	D039		500 lb
Teflon waste	D001, D002		49,909 lb
<i>Total amount of waste generated</i>		480,972 lb	440,662 lb
<i>Average monthly waste generation rate</i>		18,219 kg/mo	16,692 kg/mo

Downers Grove Sanitary District Discharge Permit

I asked Mr. Braun for the facility's effluent discharge permit. Mr. Braun did not produce it during the inspection but did scan and e-mail the permit to me on April 22, 2015.

On September 27, 2010, the Downers Grove Sanitary District issued Permit No. 1 Renewal, effective date of October 1, 2010 and expiration date of October 1, 2015, to Rexnord.

The permit states, "The total volume of wastewater discharged to the sanitary sewer system is estimated to be from 20,000 to 41,000 gallons per day and consists of three (3) components: 1) the electroplating pretreated wastewater discharge, estimated to be from 10,000 to 30,000 gallons per day; 2) the tumbler and washer generated batch discharges, estimated at 400 to 1,000 gallons per day; and 3) sanitary wastewater flows estimated at 10,000 gallons per day."

The permit establishes maximum daily and maximum monthly effluent limits for cadmium (total), chromium (total), copper, lead, nickel, silver, zinc, cyanide (total), pH and total toxic organics (TTO). Discharge limits on pH are in the range of 5.5-9.0 for any grab sample. Hexavalent chromium is limited to 0.81 mg/L and total cyanide is limited to 1.34 mg/L for any grab sample.

Contingency Plan

I asked for the facility's contingency plan and received a copy of Rexnord's "Facility Emergency Response Plan," dated March 15, 2007. The FERP identifies Sandra Parker, Environmental Response Manager, as the facility's emergency coordinator (pg. 3). It includes an emergency call list (pp. 5-6) but some of the numbers were outdated. The list of emergency equipment (Sect. 9.0, pp. 20-21) did not include locations and capabilities of fire extinguishers nor did it discuss the type of spill equipment in the hazardous waste 90-day area.

The March 2007 FERP was distributed to the local police and fire departments, Good Samaritan Hospital, the Downers Grove Sanitary District and Enviro-Safe Consulting.

RCRA Training

I asked Mr. Braun for Rexnord's personnel training records. He showed me a PowerPoint presentation of the facility's hazardous waste training. He did not produce training sign-in sheets during the inspection.

Container Inspection Logs

Current year inspection logs are maintained in the hazardous waste 90-day area.

Post Inspection:

Contingency Plan

On January 26, 2016 Mr. Braun e-mailed me and the most current version of the FERP (January 2016). The revised FERP included updated contact information, including emergency coordinator (primary and alternate) information and locations of emergency equipment.

RCRA Training

On January 26, 2016 Mr. Braun e-mailed me Rexnord's May 2015 hazardous waste training roster. Mr. Braun scanned and e-mailed the 2014 training roster (sign-in sheet) to me after the inspection on April 22, 2015. Mr. Braun only produced the 2014 training roster, not any prior years.

Container Inspection Logs

On April 23, 2015 Mr. Braun e-mailed me copies of inspection logs for 2012-2014. The records were complete.

Exit Conference:

At the completion of the records review, I summarized my findings with Mr. Braun.

Before leaving, I presented Mr. Braun with copies of the Region 5 Pollution Prevention (P2) contact information and State Agency P2 contact information fact sheet and the Illinois Waste Management and Research Center (WMRC) brochure entitled, "SUSTAINABLE SOLUTIONS – A COOPERATIVE PROGRAM FOR ILLINOIS INDUSTRY."

I left the site at approximately 2:30 pm.

